

Presentation Survival School

Level #2 Intermediate Skills Training

Breakout Session 235

Choosing the Right Images to Best Illustrate Your "Story" Image Editing Tools, Terminology and Tips

What do you need to know for this session?

In this session we're past the foundational basics of storyline and purpose and are moving into the practical illustration of our presentation stories. This session will assume you have a <u>good general knowledge</u> of PowerPoint 95, 97 or 2000 and can navigate freely within a Windows environment. You will be given exposure to other software packages but you do not necessarily need to have a working knowledge of those applications.

Session objectives:

- You'll learn image specifications needed for optimizing graphics for different presentation medium.
- You'll pickup some PhotoShop image editing techniques for your scanned images.
- Discover basic image editing in PowerPoint 97/2000 using the Picture Tool Bar.
- Learn more of the "language" of image editing.

Session Coach

Jim Endicott, Distinction Communication Owner/Manager

Jim Endicott is a nationally-recognized consultant and coach focusing on professional presentation content, design and development. His articles appear in PRESENTATIONS magazine as well as many industry websites and contain valuable insights for creating professional business presentation content and graphics. Distinction, Jim's Portland, Oregon-based consulting and design business, helps organizations effectively leverage their presentations from initial concept to final delivery. Distinction's team has supported clients such as Kemper Funds, Microsoft, PaineWebber, Covey Leadership, Smith Barney, Dale Carnegie, Charles Schwab, US Bank as well as many smaller organizations trying to enhance the professional impact of their business communication tools.

Jim Endicott jim.endicott@distinction-services.com
Distinction Communication
www.distinction-services.com
18340 NE Rainbow Lane
Newberg, OR 97132
503-554-1203

503-554-1203

[©] Copyright 2000 Distinction Communication All rights reserved.

1. Basic image description terminology

It's pretty confusing at times to sort out all the presentation jargon that gets thrown at us today. But before we can understand how to manipulate the images we use everyday, it's important to understand what they are, where they came from and what's the best way to enhance them.

Bitmap vs. vector-based artwork

PC-based graphical description languages

Bitmap images

Images are made up of thousands of small dots called pixels. The quantity and quality of these pixels will determine how clearly those images are represented in different presentation mediums. Bitmap images are typically represented by scanned photos, screen captures, video images or images produced directly from paint (or image editing) packages such as Photoshop, Paintbrush or others.

Characteristics

Can be considerably larger files
Cannot use recolor options in PowerPoint
Primary image cannot be ungrouped
Can be created with "softer" appearance (glowed, airbrush, photo-realistic)
Note: Keep to taking your presentation visuals to the next level.

Some examples:

.bmp		
.pcx		
.tif		
.jpg		
.gif		
.png		

Vector-based images

Unlike bitmap images, vector-based images are mathematically generated by the computer in response to the use of applications "drawing" tools. Every time you create an object in PowerPoint (square, circle, arrow...) Windows uses a graphical description language to reproduce the specified object with a predetermined set of display rules. Sometimes they're can be made up with a number of points that are connected and filled. Those points (often called vertices) create a "fillable" object that can be easily moved and have very small file sizes.

Characteristics

Smaller file sizes

Vector-based clipart can be ungrouped, manipulated and recolored Usually seen as static clipart or hard-edged objects created in drawing packages

Some examples:

.wmf

.cgm

.pic (mac)

Display resolutions

35mm slides Typically 4000 lines of resolution Scan at 200-250 DPI and 24 bit color

Overhead transp. Typically 300-600 of print resolution Scan at 300 DPI and 24 bit color

Electronic presentations Typically 800x600 or greater screen resolution Scan at 100 DPI and 24 bit color

Resolution dependent vs. resolution independent

How is vector artwork affected by medium resolution?

How is bitmap artwork affected by medium resolution?

Scanner settings in relationship to image size

2. Basic Photoshop image editing

Rotating the image

Placing an image sideways or upside down on the scanner means we need to first rotate the image. Under the Image menu item locate Rotate Canvas. This will provide all the options necessary to fix the orientation.

Image cropping

Eliminating unnecessary image backgrounds is a key to effectively focusing your audience's attention. Once you've selected the desired portion of the image, go to the Image menu and then the Crop option to cut out the unnecessary areas of the image. Made a mistake? Control Z (undo) and try again. Can't find the toolbar? Go to the Windows menu and down to Show Toolbar to pop it up on screen.

Enhancing image clarity

It's not uncommon for a digital 2nd generation to lose a small amount of clarity depending on the quality of scanner used so it becomes necessary to sharpen up the image. This is very easily accomplished using the Unsharp Mask option in PhotoShop. Under the Filter Menu, choose Sharpen and then Unsharp Mask. This tool adds contrast to adjacent pixels in the image to create a crisper look to a slightly blurry image.

Color & brightness improvements

Locate the Variations option by going to the Image menu, Adjust and then Variation option. A number of color and brightness version of your image appear on screen. The original image will be retained at the top while you create "what if" scenarios with your color and brightness choices. The combination of options chosen will be profiled next to your original so you don't loose track of where you started.

Contrast adjustment

Under the Image menu, locate the Brightness/Contrast option. The slide adjustments will help you flatten out an overly "contrasty" image.

Eliminate small imperfections

We're almost done. Maybe you've spotted a dust spot in the sky or another imperfection that's driving you crazy. I suggest you save at this point because it becomes very easy to mess up the good things you've done so far. Zoom into the imperfection using the magnifying glass option on the toolbar. Zoom out using ALT key and a mouse click, select the Rubber Stamp tool. This tool will replicate adjoining pixels and repaint them over the imperfection. Hold down the ALT key and select some closely adjoining, near identical pixels that are ok (you'll notice that the Stamper tool changes appearance during this selection process.) Release the Alt key and click on the imperfection. The good adjoining pixels will paint over the bad ones. I suggest small clicks as opposed to dragging lines of painted pixels. Experimentation will teach you much more than several more paragraphs on the topic.

Optimizing the image

You've completed the tough part, now it's time to wrap it up. Select Image and then Image Size. Here's where we optimize the image for your intended output.

Electronic presentation 100dpi
Digital print or overheads 300 dpi
35mm high-resolution sides 200-250dpi

Alter pixel dimensions proportionately to the size required for your presentation

Saving

Under the File menu select the "Save Copy As" option. For applications that can accept a JPEG format, scroll down to the JPEG option. Create a file name and Save. A box will pop up prompting you for different Image quality options. Other file formats are also available.

3. PowerPoint image editing tools (Picture Tool bar)



Brightness/Contrast

Recolor (vector art only)

Transparent Pixel effect

Image cropping

4. Custom template design using Photoshop

Crafting a unique template identity can be accomplished by using applications like Photoshop to create 800x600 pixel backgrounds to import into your presentation backgrounds.

NOTES:
I trust this has been an informative session for you. Paing able to enhance the fundamental characteristics of a hitman
I trust this has been an informative session for you. Being able to enhance the fundamental characteristics of a bitmap image is an important skill to possess. They're everywhere from the photos we use to the web art we re-purpose for our laptop presentations. We can then invest heavily in practicing our presentations so we can confidently deliver a well-crafted and uniquely told story.
Thank you for attending this session. If you have other questions you'd like to ask Jim Endicott and did not get a chance, please email those to him at jim.endicott@distinction-services.com .
© Copyright 2000 Distinction Communication All rights reserved



Jim Endicott

Making sense of digital graphics' alphabet soup

Jim Endicott is owner/manager of Distinction, a business communications company that provides creative and consulting support services for effective presentations. He can be reached at 503.554.1203. jim.endicott@ distinctionservices.com.

t's a hazard of my line of work that occasionally I get into conversations like this one: Me: "So, Karyn, how's it going?" My friend and colleague: "Great. Listen, I'm sorry to talk shop during lunch, but I really need that 24-bit JPEG you were

Me: "I was going to take a 10 compression and optimize it down to 96 dpi. Will that work?"

going to send me."

Karyn: "Sure. I want to use the file on my Web site, so I'll need a version crunched down to an 8-bit

At this point we stopped. We were at lunch with a group of friends, and simultaneously we both became aware that everyone else at the table was listening to us - and, as far as they were concerned, we might as well have been speaking Swahili.

In the world of presentation graphics, the terms associated with file formats and image types fly fast and furious, with more being added all the time. To outsiders, or even to the professional presenter who only occasionally dips into the development field, it all

> sounds like a strange alphabet soup of acronyms and abbreviations. If vou could use some translation, grab your scissors and clip this month's column. Here goes:

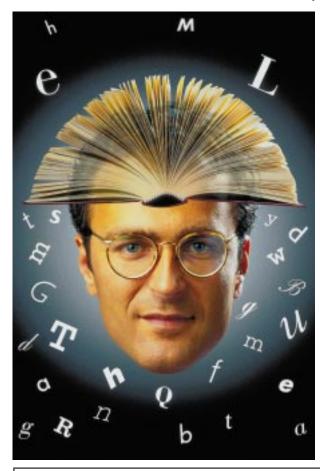
Image types

When you tackle computer graphics, the first thing you need to understand is the type of file you're working with. You'll find two types of images, determined by the image's nature and how it's created. Understanding the file type lets you know what tools you can use to manipulate the artwork - and how far you can press the manipulation before you trash the

Vector-based graphics. The most commonly found

image in today's presentation software is vector-based file artwork. When you select a PowerPoint drawing tool (LINE, CIRCLE, BOX, AUTO SHAPES), you are creating a manufactured object. This means that as soon as you anchor the starting point, your operating system's object-description language references the shape, anchors the point, and, in the case of a box, creates an object that has equal lengths on opposite sides. When you release your mouse, Windows (or the Macintosh operating system) knows that this is where your object ends, and it creates that pre-defined shape to fill the parameters you've just created. Charts and most clip art are also vectorbased artwork, so all are easily

There are some real benefits to working with a vector-based image. First, its file size is small, because what it really represents is a simple mathematical equation the operating system uses to recreate the object. Second, vector artwork can be easily resized and moved between slides. Third, you can use the UNGROUP and REGROUP commands to edit a graphic's individual points or vertices. In more complex images, such as maps, this helps you smooth out the artwork's irregular portions. (Moreabstract shapes can be edited by right-mouse-clicking on the object and selecting EDIT POINTS. This shows the individual points that make up the shape; holding down the SHIFT key while you click will add points, and holding down CONTROL as you click will remove them.) Fourth, changing color on vector artwork is a piece of cake. It's easiest to use the standard LINE COLOR and FILL COLOR menus for this, but remember that grouped artwork needs to be ungrouped



Reproduced with permission from Presentations magazine. Copyright 1999, Bill Communications Inc. 800.707.7749. www.presentations.com.

before you can alter colors.

How do you tell if someone is sending you one of these images? Check the file's three-letter extension, which should indicate its format. File formats for vector-based images can include: WMF, or Windows metafile, the generic Windows-based interchange format that's easy to import; CGM, or computer-graphic metafile, which is less common than it used to be; and a variety of proprietary formats viewable only with vendor-specific viewers for clip art on CDs.

Bitmapped graphics. The second object type you will no doubt encounter is a bitmapped image, sometimes called a raster image. These images are created from thousands (or more) pixels, stacked by column and row. Individually, each pixel is a single dot of color, but when you zoom out and take in the big picture, all of them make up a complete image. Scanned photos and screen captures are bitmap images, with each pixel assigned a unique color value. How wide a range of colors you have available, the "color depth," is determined when you scan the image. An 8-bit color scan means that any pixel can have any one of 256 unique color values, which sounds good until you compare it with a 24-bit scanned file — in which a pixel can have any one of 16.8 million color options. With more color options, your final image is more photo-realistic, with smooth gradients, subtle variations and bright colors. Unfortunately, it also takes up significantly more file space. For that reason, you might decide that a logo looks fine at 8 bits, but a photo needs to be scanned at 24-bit color. (Not sure? Do a test and compare the results onscreen.)

With tens of thousands of pixels having millions of color options, a bitmapped file gets large fast. It's not unusual for a 300-dpi image scanned at 24-bit color to be between five and 10 megabytes or more in size — known to network administrators (who hate them) as

a "brick." So if you know where the image will ultimately be used, you can scan accordingly.

Here's a brief primer on roughly how many dpi certain applications require:

Web-site graphics 72 dpi

Electronic presentations 72-96 dpi

35mm slides (4,000 lines of resolution) 200-300 dpi

Desktop printer, overheads, prints 300 dpi

Desktop publishing 300-600 dpi

Image archiving

up to 1,200 dpi

(The term *dpi*, incidentally, is more of a reference point than a truly useful number. This specification reflects scanning's roots in desktop publishing, when — you remember — we first defined an image's printed quality by the number of dots per inch our printer could lay down on paper. The more dots, the higher the quality.)

Modifying bitmapped images requires image-editing software (for instance, Adobe Photoshop, Microsoft PhotoDraw or Ulead PhotoImpact) so you can manipulate the pixels. Although most presentation templates available today are vector-based (you can recognize them by their hard edges or gradient fills), we're starting to see more bitmapped backgrounds and textures that provide more elegant and softer-edged alternatives. If you're designing a template from scratch in an application such as Photoshop, you can airbrush in subtle background elements, create soft drop shadows, merge and subdue picture elements — your only limitation is the size of your imagination.

Bitmapped file formats include: *PCX*, the generic Windows-application format, originally PC Paintbrush (4-, 8- or 24-bit); *BMP*, the standard Windows bitmap storage (1-, 4-, 8- or 24-bit); *JPEG* (or JPG), for Joint Photographic Experts Group, a 24-bit color file with superior compression charac-

teristics (because it's supported by current presentation software, it's good advice to use this whenever possible); *GIF*, graphic interchange format, an 8-bit color format (lower quality and with a smaller file size than JPG) commonly used for Web sites; *PNG*, portable network graphics, a higher-quality alternative to GIF whose larger file sizes can store up to 48 bits of information; and *TIFF*, tag image file format, a 24-bit format that moves well across different platforms and formats.

Color depth and file size

To better define the "color depth" issue, here are three mathematical formulas to show how we come to the number of colors and the ultimate file size of an image. All three involve division by 8 because 1 byte equals 8 bits, which means that an 8-bit image has 1 byte of information per pixel. (We've used a quarter-screen image size of 320 x 240 pixels.)

color depth and file size

4-bit color image

 $\frac{320 \text{ pixels} \times 240 \text{ pixels} \times 4 \text{ bits (16 colors)}}{9} = 38.4 \text{K}$

8-bit color image

 $\frac{320 \text{ pixels} \times 240 \text{ pixels} \times 8 \text{ bits (256 colors)}}{8} = 76.8 \text{K}$

24-bit color image

 $\frac{320 \text{ pixels} \times 240 \text{ pixels} \times 24 \text{ bits (16.8 million colors)}}{9} = 230.4 \text{ kg}$

Breaking the code

The graphics business has become a wide sea of esoteric lingo. Perhaps we'll never all share a comprehensive vocabulary, but it's no disgrace to have a pocket resource close by (such as this column) to help break the code.

After all, it isn't asking for help that gets you in trouble — it's not having the courage to ask.

How do you say, "Where is the bathroom?" in Swahili? ■



Jim Endicott

Jim Endicott is owner/manager of Distinction, a business communications company that provides creative and consulting support services. Jim assists business professionals in enhancing the content, tools and techniques related to effective presenting. He can be reached at 503-554-1203, distinct@ teleport.com.

PowerPoint toolbars save time, money and aggravation

he other day I had a new business phone line installed, and the guy who made it all happen looked like he had worked for the phone company for 50 years. I tried to start a conversation by saying things like, "I bet this isn't the first one of these you've hooked up," but his only response was to smile and nod.

Because he wouldn't talk, my attention moved to his leather utility belt. Batman had nothing on this guy. Every tool known to man hung meticulously from his belt, waiting to be called into service.

Not once did he get up to go back to his van. There was no point: He had everything he needed.

In the old days, when we were working with scanned photos (here comes the clever segue) we were forced to jump out of PowerPoint and, if we had some limited grasp of Photoshop or some other paint program, we tweaked our scanned photos and dropped them back into PowerPoint.

Not any more. This month we're going to take a look at two very helpful toolbars in PowerPoint 97 that reside right under our noses, eliminating the need to jump around in search of alternative tools.

Improving photos once they're inserted

One of the more challenging issues we've always struggled with is how to import high-quality scanned photos, also known as bitmapped images or raster art. The insert to picture to from file command sequence brings them in, but the images are often too dark, too contrasty, in need of cropping or are bordered by a clunky reference rectangle. In the

past, these problems may have sent us back to the drawing board, but now the tools for fixing them are right on the desktop. Here's how to use them:

After importing your scanned photo into PowerPoint 97, rightmouse-click on your scan to reveal a SHOW PICTURE TOOLBAR option. Select it and a small toolbar appears onscreen, which looks like this.

washed out). With these icons, the contrast can be changed.



The next two icons deal with the relative lightness or

darkness of an image. By clicking on the appropriate icon you can alter the brightness of the image.



Use the next icon to CROP. Although the cropping tool has been

around for a while, it's never been



Once you've selected this option, it will pop up every time you select an object that PowerPoint recognizes as a picture. Pictures can be bitmapped images as well as grouped vector art such as clip art. The icon on the far left of the picture toolbar provides a shortcut for inserting additional pictures. The next icon provides a set of image controls that can remap the image as a black-and-white, gray-scale or give it a watermark look.

Let me give you an example of how this might be helpful. In a recent project I did for a customer, he was comparing the cost of labor in 1975 and 1997. We took a picture of a worker and placed it next to the 1997 number, then pasted a gray-scale version of the same photo next to the 1975 number. This gave the image a vintage look but kept the context the same. It worked.



The next two icons on the picture toolbar make con-

trast adjustments possible. If you frequently import scans made from 35mm slides, they often appear to have very high contrast (the darks too dark and the highlights too

this accessible. You simply click on the cropping tool icon and move the cursor over any of the image resizing handles. Then click and drag to crop the image.



The RECOLOR PICTURE icon can be selected, but only if the object select-

ed is made up of vector-based artwork (such as clip art). Scanned photos can't be recolored in PowerPoint.



The next icon represents the FORMAT PICTURE option. If you're work-

ing with scanned photos that you want to optimize for electronic viewing, the SIZE tab will reveal an option allowing you to select BEST SCALE FOR SLIDE SHOW; choose the particular resolution of your laptop and projector. Although this is not as critical a step as it was for PowerPoint 95, it is still valuable.



I've saved my personal favorite for last: the TRANSPARENT PIXEL option.

In the past, I've gone to great lengths to eliminate the rectangular box that surrounds scanned photos. Many of us often want the specific image to float gracefully over the background without a telltale rectangle. The PowerPoint



development people at the Graphics Business Unit in Cupertino heard our cry, but a few things need to be done to make it work even better.

In the example shown, a product shot was scanned from the original photo — so far so good. But the background consisted of more than one color. (Remember. though, that PowerPoint will only make one pixel color transparent. If it happens to be anywhere else, you'll find tiny holes in your target image.) The image then was pulled into Adobe Photoshop and the lasso tool was used to trace around the object, turning the background behind the product shot into a single, unique pixel color that was not present in the product itself.

After importing the edited image into PowerPoint (save yourself some space and import it as a JPEG image), right-mouse click and select FORMAT PICTURE, then select the TRANSPARENT PIXEL option and select the unique background color you've created. The background will drop out and the image will appear to float over your presentation background. A word of caution: The edge will need to be a clean, hard edge. An anti-aliased edge (anti-aliasing is a function of the paint application that creates extra transition pixels, giving the appearance of softer edges) from your paint package will result in a jagged edge on your target image after the transparent pixel option is applied.

Use drawing tools to further improve images

A paint application can add even more uniqueness to your images, but I realize that not everyone is proficient in one. If this describes



you, there are a few options available to you. First, check out MS Paint (in your Windows 95 Accessories window). Or, for a quick job, you can use the PowerPoint drawing tools to draw transparent masks over portions of your scanned photo.

Of particular help might be the FREEFORM drawing tool, found by clicking on the AUTOSHAPES box in the bottom left corner of your PowerPoint screen, then selecting LINES, then the FREEFORM polygon tool. Once your objects are created, fill them with the BACKGROUND COLOR option, select NO LINE around the masking objects and GROUP them to your scanned photo.

Easily add 3D elements

Another valuable toolbar is one found by selecting an object, then clicking on the OBJECT 3D icon at the far right of your bottom toolbar. After clicking on the icon, select the 3D SETTINGS option to display another toolbar. There, you'll find enhancement options that allow you to modify the lighting of your 3D PowerPoint objects, rotate them, change the default extrusions and angles, as well as the surface appearance.

Try it. With a freshly drawn rectangle selected, click on the 3D box option in the bottom right-hand corner, adjust the attributes of the object and, just for fun, double-click on the face of your new object. Select the COLOR option, then select FILL EFFECTS and go to the PICTURE tab. Choose SELECT PICTURE and find a scanned image. After an OK, your newly created 3D box will take on a photographic face.



To eliminate the rectangular box that surrounds scanned photos (1) and (2), use PowerPoint's TRANS-PARENT PIXEL option in FORMAT PICTURE. The background will drop out (6) and, when imported into your slide, will appear to float over the background (4).



It used to be that presentation support graphics were treated as an afterthought — a necessary evil that didn't require the same level of consideration as a direct-mail piece, printed collateral or a Web site. What's changed is that the stakes for presenting badly are much higher today. Deals can be won or lost on the professionalism of our presentations.

Tools like the ones we've discussed this month can dramatically improve the level of professionalism displayed in the images you create. In the past, the presentation software we selected betrayed itself through stock templates, a predictable look and limited image options. But it didn't matter because, heck, it was *only* a presentation.

Well, there's no such thing as *only* a presentation anymore. So stretch the limits of your next presentation by leveraging what's already on your desktop to take your images to a whole new level. There are no longer any excuses.

WWW.PRESENTATIONS.COM PRESENTATIONS / JULY 1998 29



Jim Endicott

Jim Endicott is owner/manager of Distinction, a business communications company that provides creative and consulting support services. Jim assists business professionals in enhancing the content, tools and techniques related to effective presenting. He can be reached at 503-554-1203, distinct@ teleport.com.

Photoshop basics will help you hit the digital highway

henever I lean over the hood of my car, I realize that I have a fairly limited understanding of what goes on in there. Oh, I've read some books and know the theory of internal combustion — but there are a ton of

things that happen when I turn the key of which I know practically nothing. I'll tell you a secret, though: I know enough to get around.

For any of you who have opened up Adobe Photoshop for the first time with the intent of editing a photo or logo, you have probably felt a little like you just climbed behind the wheel of a Ferrari and can't find where to put the key.

Photoshop is a truly powerful editing tool, but many of us only need a small portion of the available horsepower. This month

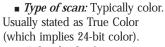
we're going to look at some basic steps you need to know to get your presentation images edited quickly in Photoshop, without running into too much trouble...so buckle up and hang on. (All menu references will be made for Macintosh version 5.0, but most exist in version 4.0 as well.)

Step 1: Scanning

Before vou can edit a photographic print, of course, you have to get it into your computer using a scanner.

Place your photograph on the scanner bed and try to keep it as square as possible to the edge by aligning it to the side of

the scannable image area. You have several basic options to consider before you scan. Different manufacturer's scanning software will not necessarily label those options the same, but the basic parameters are as follows:



- Color depth of image: Start with 24-bit (16.8 million colors). This will provide more imageenhancement options once you're in Photoshop.
- Size dimensions: Note the pixel dimension indicated in the scanning software. (e.g., 450 x 750 pixels). Create a scanned image 50 percent larger than your final requirement. Need a quarter-screen scan and you're working at 800 x 600 screen resolution? Scan at 600 pixels wide (150 percent of 400 pixels). We will be optimizing the final size before we're done with the image.
- *DPI selection:* Start with 300 dpi. We'll optimize this in Step 6. If you know you're creating an image for an electronic presentation, go ahead and start with 100 dpi. All these attributes have a direct impact on the size of the final scanned image.
- SAVE options: SAVE the resulting scan as a TIFF image and import the file into Photoshop using the FILE OPEN command in the application.



Original, unretouched image

No matter how good your original photo is, it will need some fine-tuning to make it as good as it can be. Even stock photography on a CD will typically have black borders and too much contrast because of the slide-to-digital conversion. This is where a good understanding of some of Photoshop's basic capabilities can really help.

Step 2: Rotating the image

Placing an image sideways or upside down on the scanner means that we need to first rotate the image. Under the Image menu item locate ROTATE CANVAS. Here you'll find all the options necessary to fix the orientation.

Step 3: Image-cropping

Selecting the dotted box in the upper left-hand corner of the Photoshop toolbar (Marquee tool)



will allow you to dragselect a cropping rectangle on the photographic

image. Eliminating unnecessary image backgrounds is a good way to focus your audience's attention. Once you've selected the desired portion of the image, go to the Image menu, then the CROP option to cut out the unnecessary areas of the image. Make a mistake? Hit Control-Z (UNDO) and try again. (Caution: Only Photoshop 5.0 allows you to execute more than

one level of UNDO.) Can't find the toolbar? Go to the Windows menu and down to SHOW TOOLBAR to pop it up onscreen.



After cropping (Step 3)

Step 4: Enhancing image clarity

It's not uncommon for a secondgeneration digital photo to lose a small amount of clarity, depending on the quality of scanner. Consequently, it is often necessary to sharpen up the image. This is easily accomplished using the UNSHARP MASK option in Photoshop. Under the Filter menu, choose SHARPEN and then UNSHARP MASK.

This tool adds contrast to adiacent pixels in the image to give slightly blurry images a crisper look. Start with 30 percent under the Amount section. Exercise some restraint with this tool, however. Over-sharpening can create a surreal look that detracts from the intended impact. If you want to create a subtler treatment after you've applied the UNSHARP MASK, return to the Filter menu, select the FADE UNSHARP MASK option and play with the opacity control.



Using Unsharp masking (Step 4)

Step 5: Color and brightness improvements

If you're lucky, your image colors will be perfect. But if they need some help, try this:

Locate the VARIATIONS option by

going to the Image menu, ADJUST and then select the VARIATIONS option.

A number of versions of your image will appear onscreen, with different colors and brightness levels. The original image

will be retained at the top while you create "what if" scenarios with your color and brightness choices. The combination of options chosen will be profiled next to your original so that you don't lose track of where you started. Adjusting the Coarse to Fine slide bar will create degrees of change. Click OK when you're done.



Variations window

Step 6: Contrast adjustment

Under the Image menu, locate the BRIGHTNESS/CONTRAST option. The slide adjustments will help you flatten out your image if it has too much contrast.

Step 7: Eliminate small imperfections

We're almost done. Maybe you've spotted a dust spot in the sky or another imperfection that's driving you crazy. I suggest you SAVE at this point because it becomes very easy to mess up the good things you've done so far.



ZOOM IN to the imperfection using the magnifying-glass option on

the toolbar (ZOOM OUT using ALT key and a mouse click), then select the Rubber Stamp tool. This tool will replicate adjoining pixels and repaint them over the imperfection. Hold down the ALT key and select some closely adjoining, near-identical pixels. (You'll notice that the Stamper tool changes

appearance during this selection process.) Release the ALT key and click on the imperfection. The good adjoining pixels will paint over the bad ones. I suggest small clicks as opposed to dragging lines of painted pixels. Experimentation will teach you much more than I can go into here.

Step 8: Optimizing the image

You've completed the tough part, now it's time to wrap it up. Select IMAGE and then IMAGE SIZE. Here's where we optimize the image for your intended output.

- Electronic presentation: 100 dpi. Alter pixel dimensions proportionately to the size required for your presentation.
- Digital print or overheads: 300 dpi. Same pixel dimension instructions.
- 35mm high-resolution slides: 200-250 dpi. Same pixel dimension instructions.

Step 9: Saving

Under the File menu select the SAVE A COPY option. For applications that can accept a JPEG format, scroll down to the JPEG option. Create a file name and SAVE. A box will pop up prompting you with different image-quality options. Other file formats are also available.



Final, retouched image

We've only touched on the functional basics of Photoshop, but that's OK. There's a lot you can do without being a Photoshop whiz. Besides, it's kind of fun to drive a Ferrari to the grocery store for milk and eggs once in a while.